

7. (cancelled)

8. (cancelled)

9. (cancelled)

10 10. (cancelled)

11. (cancelled)

12. (amended) A web-based system for facilitating diagnosis of medical symptoms comprising:

15 (a) an automated database that is a real-time, web-based system that includes statistically accrued data that is input from multiple sources via a common web-based system template, the common web-based system template providing a medium for entering data into the database that includes actual diagnoses and patient symptoms and information from patient populations, and further, the common template being used to generate a matrix that includes a plurality of
20 possible post-test diagnostic outcomes, each outcome indicating a possible disease and probability for the disease, and further, reporting the possible post-test outcomes to a user as a list of diagnostic probabilities ranked from the most likely to the least likely of possible diagnoses for a patient under examination; with
(b) each possible post-test outcome in the matrix being generated from an
25 array of mathematical factors, multiplied together in series, that are based on patient symptoms and information, with one of the factors being a pre-test odds factor, and with [each of] the other factors in the array being input as [an] a plurality of independent [variable] likelihood ratios that [is] are produced from answers to individual patient questions [or] and results from diagnostic tests for

30 that patient[, and indicates the likelihood of a post-test diagnostic outcome based
on past data entered via the common web-based template], and wherein the
[factors] likelihood ratios in the array are multiplied together with the pre-test
odds factor to produce the possible post-test diagnostic outcome that indicates a
possible disease and probability for the disease; and still further;

35 (c) [an independent variable is generated for each array for each possible
post-test outcome in the matrix nearly simultaneously in response to each patient
answer or test result] each likelihood ratio is calculated from a web-based
likelihood ratio template, the likelihood ratio template having a plurality of cells,
each with an independent cell value, created by a user-selected number of rows
40 and columns that is greater than 2 X 2, for calculating likelihood ratios based on
more than two criterion, the more than two criterion including positive and
negative test results and further including other criteria that are independent of
test results, and still further, each likelihood ratio being calculated by calculating a
positive likelihood ratio ("positive LR") and negative likelihood ratio ("negative
45 LR") for each cell value in each column and each row, using an algorithm that
includes the following mathematical expressions:

$$(1) \text{ Positive LR} = (X/a) / ((b - X)/(M - a));$$

$$(2) \text{ Negative LR} = (a - X/a) / ((M - a) - (b - X)/(M - a));$$

and wherein X = a mathematical cell value;

50 M = the sum of all cell values across all rows and columns;
b = total of specific column containing X;
a = total of specific row containing X;